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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,552	10/31/2001	Ali Bani-Hashemi	2000P09022US01	7658

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Siemens Corporation  
Intellectual Property Department  
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EXAMINER

PATEL, SHEFALI D

ART UNIT PAPER NUMBER

2624

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/001,552

Applicant(s)

BANI-HASHEMI ET AL.

Examiner

Shefali D. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 7, 8, 10-14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 8, 10-14 and 16-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. The amendment was filed on June 7, 2006.
2. Claims 4, 6, 9, 15 and 19 are cancelled.

### *Response to Arguments*

3. Applicant's arguments (Remarks on pages 7-11) filed on June 7, 2006 with respect to claims 1-4, 7-8 and 10-17 have been considered but are moot in view of the new ground(s) of rejection.

### *Drawings*

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **“program storage device readable by a machine”** claimed in claim 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

5. The following quotations of 37 CFR § 1.75(a) is the basis of objection:

(a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

6. Claim 7 is objected to under 37 CFR § 1.75(a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

The examiner noticed that claim 7 recites "A program storage device readable by a machine,..." However, it is unclear what really is this "machine" as it is not clear from the specification. The examiner do not see this "machine" disclosed anywhere in the specification. The specification does not describe in detail the limitations recited at lines 1-3 of claim 7. The specification on page 3 lines 10-14 and page 4 lines 4-8 discloses "computer readable program code" which is not sufficient to meet the limitation claimed in the present application. The examiner also notices element 13 in Figure 1 labeled with "computing platform" which is described as "personal computer" on page 5 lines 22-24. Applicant is invited to point to the section of the specification that provides support for this limitation, or to amend the specification to provide such support (i.e., without adding new matter).

The examiner suggests that the applicant replace the word "machine" in claim 7 lines 1 and 2 with the word "computer".

The following will be assumed for examination purposes: The computer program product stored on a computer readable medium will be assumed to a system for this communication.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

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patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 7-8, 10 and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin (US 6,346,933).

With regard to **claim 1** Lin discloses a method for illuminating a target point in a real scene (Figure 1), comprising steps of: capturing a digital image of a scene (col. 4 lines 18-22); identifying image coordinates of a target point in the digital image of the scene, wherein identifying comprises (col. 4 lines 29-32); displaying the digital image of the scene (display 12); selecting a target point in the displayed digital image of the scene (col. 4 lines 38-42); and determining image data coordinates corresponding to the selected target point (col. 4 lines 50-60); and projecting a laser light beam at a target point in the real scene, which corresponds to the selected target point in the displayed image, using the identified image coordinates (col. 4 line 60 to col. 5 lines 1-30).

With regard to **claim 2** Lin discloses converting the image coordinates of the target point to light coordinates for directing the laser light beam; and processing the light coordinates to direct the laser light beam to the target point in the real scene (col. 5 lines 17-60 where the movement of the laser light beam coordinates is calculated and converted to be compared with the images 63).

With regard to **claim 3** Lin discloses optical device for image capture and light projection (col. 1 lines 14-22 and as seen in Figure 1).

**Claim 7** recites identical features as claim 1 except claim 7 is a program storage device readable by machine claim. Thus, arguments similar to that presented above for claim 1 is equally applicable to claim 7. Please note that this is disclosed by Lin in Figure 1.

**Claim 8** recites identical features as claim 2. Thus, arguments similar to that presented above for claim 2 is equally applicable to claim 8.

**Claim 10** recites identical features as claim 1 except claim 10 is a system claim. Thus, arguments similar to that presented above for claim 1 is equally applicable to claim 10. Please note that this is disclosed by Lin in Figure 1.

**Claim 12** recites identical features as claim 3. Thus, arguments similar to that presented above for claim 3 is equally applicable to claim 12.

With regard to **claim 13** Lin discloses illuminating device including a light-emitting plane as seen in Figure 1 (image projector 23 and illumination source 25).

With regard to **claim 14** Lin discloses activating a point source in the light-emitting plane that corresponds to a projection of the target point on the light-emitting plane (col. 3 lines 25-32; image projector 23 and illumination source 25).

#### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin.

With regard to **claim 11** it would have been obvious matter of design choice to modify Lin's reference by having common optical properties between image capture device and illumination device since applicant has not discloses that having common optical properties solves any stated problem or is for any particular purpose and it appears that the Lin discloses both image capture device and an illumination device to have common optical properties because Lin does not discloses having not common properties, see col. 4 lines 49-67. Lin's system as seen in Figure 1 would perform equally well with having common optical properties.

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11. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Kuban et al. (hereinafter, "Kuban") (US 5,359,363).

With regard to **claim 5** Lin discloses a camera that captures an image as disclosed above in claim 1 and the arguments are not repeated herein, but are incorporated by reference. Lin does not expressly disclose having an omni-directional camera. Kuban discloses omni-directional camera at element 32 Figure 6, col. 9 lines 28-43. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Kuban with Lin. The motivation for doing so is to determine the locations of x and y in the imaging array and by doing this one can transform an image from the input video buffer to the output video buffer exactly as suggested by Kuban at col. 8 lines 40-57. Therefore, it would have been obvious to combine Kuban with Lin to obtain the invention as specified in claim 5.

**Claim 18** recites identical features as claim 5. Thus, arguments similar to that presented above for claim 5 is equally applicable to claim 18.

12. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Ho (US 5,864,417).

With regard to **claim 16** Lin discloses a laser beam device as disclosed above in claim 1 and the arguments are not repeated herein, but are incorporated by reference. Lin does not expressly disclose having a beam generator, a deflector and a plurality of motors. Ho discloses a laser beam generator (col. 3 lines 14-16); a deflector for deflecting the laser beam emitted from the laser beam generator (mirrors 21a and 21b at col. 3 lines 16-50); a plurality of motors, operatively connected to the deflector, for positioning the deflector to deflect the laser beam to the target point (motors 22a and 22b at col. 3 lines 16-50). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Ho with Lin. The motivation for doing so is to change the motor rpm enabling

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more variations of scanned patterns (or menus in Lin) as suggested by Ho at col. 3 lines 36-45. Therefore, it would have been obvious to combine Ho with Lin to obtain the invention as specified in claim 16. \

With regard to **claim 17** Ho discloses generating control signals to control the plurality of motors to position the deflector at an appropriate angle (col. 3 lines 28-35).

### *Conclusion*

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shefali D. Patel whose telephone number is 571-272-7396. The examiner can normally be reached on M-F 8:00am - 5:00pm (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shefali D Patel  
Examiner  
Art Unit 2624

sdp

JINGGE WU  
PRIMARY EXAMINER

